

## **ABSTRACT**

A composite lid for a semiconductor package, in which the lid includes at least two materials. The first material is disposed over and attached to the back surface of the die with a low-modulus thermal gel, and the second material is disposed towards the perimeter of the lid. The second material has a modulus of elasticity greater than the modulus of elasticity of the first material, and preferably, at least twice that of the first material.